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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,366	12/22/2005	Torsten Kulke	TM/4-22906/A/PCT	3644
324	7590	01/07/2008	EXAMINER	
JoAnn Villamizar			NGUYEN, KHANH TUAN	
Ciba Corporation/Patent Department				
540 White Plains Road			ART UNIT	
P.O. Box 2005			PAPER NUMBER	
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			01/07/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/562,366	<b>Applicant(s)</b> KULKE ET AL.	
	<b>Examiner</b> Khanh T. Nguyen	<b>Art Unit</b> 1796	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 November 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Final*

### *Response to Amendment*

1. The amendment filed on 11/01/2007 is entered and acknowledged by the Examiner. Claims 1-14 are currently pending in the instant application.
2. The objection to the specification for minor informalities is withdrawn in light of Applicant's amendment. The objection to claims 1-14 for minor informalities is withdrawn in light of Applicant's amendment. The rejection of claims 1-5, 10, and 13-14 under 35 U.S.C 102(b) over Pegelow et al. (U.S Pub. 2004/0031107) is withdrawn in view of Applicant's amendment. The rejection of claims 6-9 and 11-12 under 35 U.S.C 103(a) over Pegelow et al. (U.S Pub. 2004/0031107) in view of Reuscher et al. (U.S Pat. 5,728,823) is withdrawn in view of Applicant's amendment.
3. It is noted that Applicant has amended claim 1 to overcome the rejection by excluding the emulsifier of formula (6) selected from a Markush of emulsifiers. According to the MPEP, if a Markush claim or other claim that sets forth alternatives is rejected under 35 U.S.C. 102 or 103 or on any other basis (e.g., 35 U.S.C. 101 or 112) with respect to any one of the alternatives, a second or subsequent action on the merits may be made final, as long as any new rejection is necessitated by amendment such as an amendment **to exclude the unpatentable alternative(s)**, or a new rejection is

based on art supplied in an IDS that meets the requirements of 37 CFR 1.97(c) and for which the fee set forth in 37 CFR 1.17(p) was paid.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1, 2, 4, 5, 10, and 11 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, and 4-7 of copending Application No. 09/790,759. Although the conflicting claims are not identical, they are not patentably distinct from each other because both inventions are directed towards an aqueous dispersion composition comprising of a  $\beta$ -cyclodextrin, a crosslinking agent, and an emulsifier that is used to treat fabric material.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102***

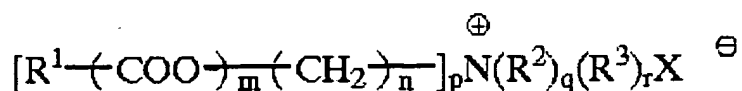
6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

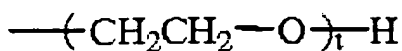
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5, 10, 11, and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Moors et al. (U.S. Pub. 2002/0007517 hereinafter, "Moors").

With respect to claims 1-3 and 10, Moors teaches an aqueous dispersion for treating textiles fabrics [0044] comprising of A) an unsubstituted cyclodextrin or a mixture of such cyclodextrins such as  $\alpha$ -cyclodextrin,  $\beta$ -cyclodextrin, and  $\gamma$ -cyclodextrin [0007, 0020], B) an aliphatic carboxylic acid of 8 to 24 carbon atoms [0008], C) a cationic surfactant (i.e. emulsifier) or a mixture of such surfactants [0009]. Moors further teaches the said surfactant having a general formula (I):



wherein  $R^2$  and  $R^3$  are independently hydrogen, an alkyl radical of 1 to 6 carbon atoms or a radical of the formula:



and  $\text{X}^\ominus$  is a anion of monomethyl sulfate [0022-0036]. Moors also teaches the said aqueous dispersion may additionally include a cellulose crosslinker such dimethyldihydroxy-ethylene-urea to improve the durability of the dispersion on cellulose textiles [0014] and permanently affixing the cyclodextrin to the textile in order to absorb perspiration and reduce unpleasant odor [0002]. The dimethyldihydroxyethyleneurea crosslinking agent is considered to be capable of building a polymeric film on the textile fiber or has the ability to react with nucleophilic or electrophilic sites or chemical groups within the textile fiber material.

The reference specifically or inherently meets each of the claimed limitations in their broadest interpretations. The reference is anticipatory.

Regarding claims 4 and 5, Moors teaches the amount ratio of unsubstituted cyclodextrin (Component A) is in the range from 10 to 20 parts by weight, aliphatic carboxylic acid (Component B) is in the range 25 to 80 parts by weight and surfactant or emulsifier (Component C) is in the range 25 to 150 parts by weight [0037-0040]. Moors further teaches the aqueous dispersion comprising of 10-40 weight percent of the total sum of component A, B, and C [0043].

Regarding claims 13 and 14, Moors teaches a textile treatment process wherein a textile fabric material such as wool, cotton, nylon or polyester is treated with the

aqueous dispersion finisher composition to affix the finish to the textile [0002, 0044, and 0045].

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

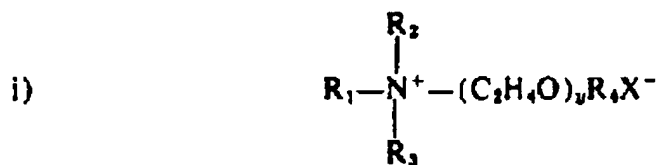
9. Claims 1, 2, 4, 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trinh et al. (U.S Pat. 6,284,231 hereinafter, "Trinh") in view of Laughlin et al. (U.S Pat. 3,925,262 hereinafter, "Laughlin").

Trinh teaches an aqueous odor-absorbing composition comprising of about 0.1-20 weight percent uncomplexed cyclodextrin (i.e. component a) such as  $\beta$ -cyclodextrin (Col. 8, line 8-12) and an effective amount of 3) a mixture of 1) cyclodextrin compatible surfactant (i.e. emulsifier) and 2) cyclodextrin compatible antimicrobial active to improve the performance of the composition (Abstract). Trinh further teaches the amount of surfactant presence in the composition ranges from about 0.01% to about 2% (Col. 4, lines 62-67). The cyclodextrin compatible surfactant is incorporated into the cyclodextrin-containing aqueous composition to reduce the surface tension to less than about 10 % from that of the same concentration solution containing 1% cyclodextrin to

permit the composition to spread readily and more uniformly on hydrophobic surfaces like polyester and nylon (i.e. synthetic fabric) (Col. 10, lines 1-44). Trinh also teaches the said surfactant include polyoxyethylene-polyoxypropylene polymeric surfactant include those based on ethylenediamine (Col. 10, lines 45-58), Trinh further teaches the amount of antimicrobial active selected from halogenated compounds, cyclic nitrogen compounds, quaternary compounds, and phenolic compounds is in the range from about 0.01% to about 1.2% (Col. 5, lines 9-23 and Col. 14, lines 1-67). Trinh disclosure of an antimicrobial active is considered readable on a buffer selected from the group consisting of borax, borates, phosphates, polyphosphates, oxalates, acetates and citrates.

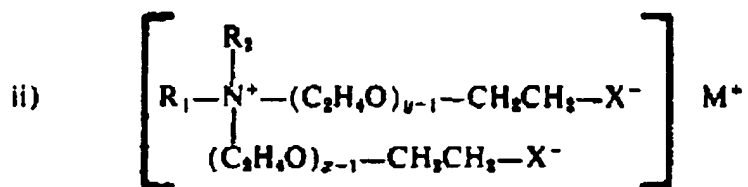
Trinh generally teaches an emulsifier but not explicitly an emulsifier having the claimed formula structure of formula (1), (2), (3), (4), or (5).

Laughlin teaches a detergent composition capable of removing soil from fabric such as cotton, polycotton and polyester (Col. 1, lines 61-65) comprising of a surfactant having a formula selected from:



wherein R<sub>1</sub> is select from straight and branched chain C<sub>8</sub>-C<sub>30</sub> alkyl and alkenyl moieties and alkaryl moieties in which the alkyl group has 10-24 carbon atoms; R<sub>2</sub> is select from straight and branched chain C<sub>8</sub>-C<sub>21</sub> alkyl and alkenyl moieties, alkaryl moieties in which

that alkyl group has 6-16 carbon atoms, and C<sub>1-4</sub> alkyl and hydroxyalkyl moieties; R<sub>3</sub> is select from straight and branched chain C<sub>8</sub>-C<sub>21</sub> alkyl and alkenyl moieties, alkaryl moieties in which that alkyl group has 6-16 carbon atoms, and C<sub>1-4</sub> alkyl and hydroxyalkyl moieties and -(C<sub>2</sub>H<sub>4</sub>O)<sub>x</sub>H wherein x has a value of about 3 to about 50; R<sub>4</sub> is select from the group of C<sub>1</sub>-C<sub>8</sub> alkylene, C<sub>3</sub>-C<sub>8</sub> alkylene, 2-hydroxy C<sub>3</sub> alkylene and 2- and 3-hydroxy C<sub>4</sub> alkylene moieties and C<sub>1</sub>-C<sub>4</sub> alkylene moieties provide that where R<sub>3</sub> is -(C<sub>2</sub>H<sub>4</sub>O)<sub>x</sub>H then R<sub>4</sub> is -CH<sub>2</sub>-CH<sub>2</sub>-; X<sup>-</sup> is an anion selected from sulfate and sulfonate radicals; and y have a value in the range of 2-100 provide that wherein R<sub>3</sub> is -(C<sub>2</sub>H<sub>4</sub>O)<sub>x</sub>H then x + y ≥ 10. (Col. 2, lines 20-57).



wherein R<sub>1</sub> is select from linear and branched chain C<sub>8</sub>-C<sub>30</sub> alkyl and alkenyl radicals; R<sub>2</sub> is select from linear and branched chain C<sub>8</sub>-C<sub>30</sub> alkyl and alkenyl radicals and C<sub>1-4</sub> alkyl and hydroxyalkyl radicals; X<sup>-</sup> is an anion selected from sulfate and sulfonate; and y have a value in the range of 2-100 provide that x + y ≥ 12. M is a cation selected from alkali metal, ammonium, and alkanolammonium ions. (Col. 2, line 60 to Col. 3, line 10).  
Laughlin disclosure of a surfactant is considered readable on at least one claimed emulsifier having a formula structure of formula (1), (2), (3), (4), or (5).

Therefore, it would have been obvious to a skilled artisan at the time the invention to arrive at the claimed composition by incorporating an emulsifier having the

claimed structure as suggested by Laughlin into Trinh's aqueous odor-absorbing composition in order to remove soil from textile material while absorbing unpleasant odor.

10. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over English Translated of Ohama (JP Pub. 2000-345106 hereinafter, "Ohama").

Ohama teaches a water-base coating solution comprising of A) a  $\beta$ -cyclodextrin, B) an antistatic agent, C) a surfactant (i.e. emulsifier), D) a hydrophilic binder, and E) a hydrophobic polymer binder (Abstract). The binders are considered readable on a resin finishing agent or crosslinking agent.

Ohama generally teaches an emulsifier but not explicitly an emulsifier having the claimed formula structure of formula (1), (2), (3), (4), or (5).

However, the emulsifier having the structure of formula (1), (2), (3), (4), and (5) are known emulsifier. Thus, it would have been obvious to a skilled artisan at the time the invention to arrive at the claimed composition by incorporating an emulsifier of having the claimed formula structure into Ohama's water-base coating solution because such an emulsifier is known in the art.

11. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over English Translated of Nakamura et al. (JP Pub. 10-025442 hereinafter, "Nakamura").

Nakamura teaches an aqueous erasable ink comprising of A) water as a solvent, B) a coloring agent, C) an emulsion of oily substance, D) a cyclodextrin or its derivative,

E) a resin, and F) a surface active agent (i.e. emulsifier) (Abstract). The disclosure of a resin is considered readable on a resin finishing agent or crosslinking agent.

Nakamura generally teaches an emulsifier but not explicitly an emulsifier having the claimed formula structure of formula (1), (2), (3), (4), or (5).

However, the emulsifier having the structure of formula (1), (2), (3), (4), and (5) are known emulsifier. Thus, it would have been obvious to a skilled artisan at the time the invention to arrive at the claimed composition by substituting the emulsifier of Nakamura with a known emulsifier.

12. Claims 6-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moors (U.S. Pub. 2002/0007517) as applied to the above claims, and in view of Reuscher et al. (U.S. Pat. 5,728,823 hereinafter "Reuscher").

Moors is relied upon as set forth above. With respect to instant claim 6, Moors does not explicitly disclose a textile cleaning material wherein the reactive group of the cyclodextrin derivative is a nitrogen-containing heterocycle having at least one substituent selected from the group consisting of halogen and unsubstituted or substituted pyridinium.

In an analogous art, Reuscher teaches an aqueous polymer dispersion composition for treating textile and may be employed for finishing the textile material (Col. 11, lines 36-37 and Col. 12, lines 57-60). Reuscher also teaches a reactive cyclodextrin derivative containing at least one nitrogen-containing heterocycle having at least one electrophilic center (Col. 1, lines 41-43). The electrophilic center can be

identical or different and are carbon atoms to which halogen, in particular F or Cl, or unsubstituted or substituted pyridinium is covalently bonded (Col. 1 lines 46-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to formulate an aqueous dispersion composition of Moors with a reactive cyclodextrin derivative as taught by Pegelow that contain a nitrogen-containing heterocycle having a electrophilic center unsubstituted or substituted pyridinium in order to provide chemical bonding between the cyclodextrin derivative to the polymer or cellulose textile fiber.

Regarding claims 7-9, Reuscher further discloses the reactive group of the cyclodextrin derivative is a) a triazine group of formula (8) wherein  $R_7$  is fluorine, chlorine, unsubstituted or carboxy-substituted pyridinium or hydroxy, and  $R_8$  is as defined above for  $R_7$  or is a radical of formula  $-OR_9$  or  $--N(R_{10})R_{11}$ , wherein  $R_9$  is hydrogen, alkali,  $C_1$ - $C_8$  alkyl which is unsubstituted or substituted by hydroxy or  $C_1$ - $C_4$  alkoxy, and  $R_{10}$  and  $R_{11}$ , independently from each other, are hydrogen (Col. 4, lines 50-60); or b) a pyrimidinyl group of formula (9) wherein one of radicals  $R_{12}$  and  $R_{13}$  is fluorine or chlorine and the other one of radicals  $R_{12}$  and  $R_{13}$  is fluorine, chlorine, or is a radical of formula  $-OR_9$  or  $--N(R_{10})R_{11}$  as defined above, and  $R_{14}$  is  $C_1$ - $C_4$  alkylsulfonyl,  $C_1$ - $C_4$  alkoxy sulfonyl,  $C_1$ - $C_4$  alkoxy carbonyl,  $C_2$ - $C_4$  alkanoyl, chlorine, nitro, cyano, carboxyl or hydroxyl (Col. 3, lines 45-60); or c) a dichloroquinoxaline group of formula (10) (Col. 4, lines 10-15).

Regarding claim 12, Reuscher further discloses a buffer selected from the group consisting of phosphates, carbonates, acetates and citrates (Col. 6, lines 50-57).

### ***Response to Arguments***

13. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection set forth above.

### ***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh T. Nguyen whose telephone number is (571) 272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



KTN  
12/28/2007



Mark Kopec  
Primary Examiner